

ABSTRACT OF THE DISCLOSURE

A method for selective cleavage of C-N bonds genes that encode for at least one enzyme suitable for conversion of carbazole to 2-aminobiphenyl-2,3-diol are combined with a gene encoding an amidase suitable for selectively cleaving a C-N bond in 2-aminobiphenyl-2,3-diol, forming an operon that encodes for cleavage of both C-N bonds of said carbazole. The operon is inserted into a host culture which, in turn, is contacted with the carbazole, resulting in selective cleavage of both C-N bonds of the carbazole. Also disclosed is a new microorganism that expresses a carbazole degradation trait constitutively and a method for degrading carbazole employing this microorganism.